

### ABSTRACT

The present invention relates to a solid catalyst component for the polymerization of olefins  $\text{CH}_2=\text{CHR}$  in which R is hydrogen or a hydrocarbon radical with 1-12 carbon atoms, comprising Mg, Ti, halogen and an electron donor selected from thiophene dicarboxylate derivatives of a particular formula. Said catalyst components when used in the polymerization of olefins, and in particular of propylene, are capable to give polymers in high yields and with high isotactic index expressed in terms of high xylene insolubility.